

**REMARKS**

By this Amendment, Applicants amend claims 15, 17, 18, 20, 21, 28, 35, and 38 to more appropriately define the present invention. Applicants also amend claim 33 to correct a typographical error. No new matter is introduced. Claims 15, 17-23, and 28-38 are pending in this application.

As a preliminary matter, Applicants respectfully request that the Examiner acknowledge Applicants' claim for foreign priority on the priority section of the Office Action Summary (PTOL-326). Applicants note the Examiner acknowledged Applicants' claim for foreign priority in the Detailed Action section of the Office Action. However, an acknowledgement of the claim on the Office Action Summary appears to have been inadvertently omitted.

Applicants also respectfully point out that the Examiner inadvertently referred to Applicants' request filed on September 30, 2003 as a CPA under 37 C.F.R. § 1.53(d), while it was actually a Request for Continued Examination (RCE) filed under 37 C.F.R. § 1.114.

In the Office Action dated November 26, 2003, the Examiner rejected claims 15, 17-18, 22, and 38 under 35 U.S.C. § 103(a) as unpatentable over Fukuda et al. (U.S. Patent No. 6,329,991) in view of Priem et al. (U.S. Patent No. 5,237,650); rejected claims 20 and 21 under 35 U.S.C. § 103(a) as unpatentable over Fukuda in view of Priem and further in view of Willan (EP 0367405); and rejected claims 28, 35, and 36 under 35 U.S.C. § 103(a) as unpatentable over Priem in view of Fukuda and further in view of Gengler (U.S. Patent No. 5,260,695).

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The Examiner also allowed claims 19, 23, 29-34, and 37, according to the Office Action Summary. Applicants thank the Examiner for the indication of allowable subject matter. Applicants note that it appears the Examiner inadvertently included a paragraph from a prior Office Action that previously indicated that these claims were objected to, on page 9 of the present Office Action. Applicants rewrote claims 19, 23, 29, and 33 in independent form in the Amendment After Final of August 13, 2003, which Applicants requested entry of in the Request for Continued Examination (RCE) filed on September 30, 2003. Therefore, Applicants believe the Examiner has since allowed claims 19, 23, 29-34, and 37 per the Office Action Summary. Should this understanding be incorrect, Applicants respectfully request that the Examiner clarify the status of these claims in the next Office Action.

Applicants respectfully traverse the rejection of claims 15, 17-18, 22, and 38 under 35 U.S.C. § 103(a) as unpatentable over Fukuda in view of Priem. To establish a proper *prima facie* case of obviousness under 35 U.S.C. § 103(a), the Examiner must demonstrate each of three requirements. First, the reference or references, taken alone or combined, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03 (8<sup>th</sup> ed. 2001). Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. See M.P.E.P. § 2143.01 (8<sup>th</sup> ed. 2001). Third, a reasonable expectation of success must exist. See M.P.E.P. § 2143.02 (8<sup>th</sup> ed. 2001). Moreover, each of these requirements must be found in the prior art, not in applicant's disclosure. See M.P.E.P. § 2143 (8<sup>th</sup> ed. 2001).

Applicants' claim 15 recites "a game device for displaying . . . an object moving in accordance with developments of a game" including, among other things, "trace mark drawing means for drawing a trace mark in length within a predetermined range from said present position according to a movement of said object, said trace mark comprising a plurality of polygons, and for gradually extinguishing said trace mark starting from a rear section of said trace mark by progressively making said rear section lighter in color and moving toward a front section of said trace mark with a lapse of time, wherein said polygons toward the rear of said trace mark disappear first." Fukuda and Priem, taken alone or in combination, do not disclose or suggest at least these exemplary features of Applicants' claimed invention.

By contrast, Fukuda discloses a data processing method and apparatus that allows a user of a pen input device to input and output trace data. In one embodiment, Fukuda discloses changing the brightness of the entire trace over time (col. 3, lines 42-44, Fig. 7, STEP 54). In another embodiment, Fukuda discloses varying the thickness of an entire trace over time (col. 4, lines 18-22, Fig. 10, STEP 84). However, Fukuda does not disclose or suggest at least "trace mark drawing means for drawing a trace mark in length within a predetermined range from said present position according to a movement of said object, said trace mark comprising a plurality of polygons, and for gradually extinguishing said trace mark starting from a rear section of said trace mark by progressively making said rear section lighter in color and moving toward a front section of said trace mark with a lapse of time, wherein said polygons toward the rear of said trace mark disappear first," as recited in claim 15.

The Examiner alleges Priem makes up for the deficiencies of Fukuda, citing col. 4, lines 2-5 of Priem. Applicants respectfully disagree. Priem discloses a technique used by a bit-mapped computer output display to indicate to a viewer differing depths of portions of a line or an object. The technique varies the intensity of the bits making up a line as the depth of the line increases. Fading the line's intensity over distance creates an effect of an image showing the line receding progressively further from a viewer. Col. 3, line 66 to col. 4, line 5. In particular, Priem teaches providing the fullest intensity at the closest location of a line and the least intensity at the farthest location from the eye. Points on the line between the beginning and end are given intensity values varying linearly between the intensities of the two end points. Col. 4, lines 7-14. In other words, Priem teaches drawing a line such that the pixels **closest** to the viewer are drawn with a **highest** intensity. The pixel intensity decreases over distance for pixels located on portions of the line that are farther away from the viewer. Accordingly, pixels located the **farthest** from the viewer are drawn with the **least** intensity. Therefore, Fukuda and Priem do not disclose or suggest at least "trace mark drawing means for drawing a trace mark in length within a predetermined range from said present position according to a movement of said object, said trace mark comprising a plurality of polygons, and for gradually extinguishing said trace mark starting from a rear section of said trace mark by progressively making said rear section lighter in color and moving toward a front section of said trace mark with a lapse of time, wherein said polygons toward the rear of said trace mark disappear first," as recited in claim 15.

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For at least the above reasons, Applicants respectfully request the Examiner to withdraw the rejection of claim 15. Claims 17, 18, and 22 depend from claim 15 and are allowable for at least the reasons described above for allowable claim 15.

Independent claim 38 recites a combination including, among other things, "drawing a trace mark in length within a predetermined range from said present position according to the movements of said object, said trace mark comprising a plurality of polygons; and gradually extinguishing said trace mark starting from a rear section of said trace mark by progressively making said rear section lighter in color and moving toward a front section of said trace mark with a lapse of time, wherein said polygons toward the rear of said trace mark disappear first." As discussed above in connection with claim 15, Fukuda and Priem, taken alone or combination, do not disclose or suggest at least these features of Applicants' claimed invention. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 38.

Applicants respectfully traverse the rejection of claims 20 and 21 under 35 U.S.C. § 103(a) as unpatentable over Fukuda and Priem in view of Willan. Claim 20 depends from claim 15 and thus includes all of the recitations thereof. As discussed above, Fukuda and Priem do not teach or suggest all of the features recited in claim 15. In addition, Willan does not cure the deficiencies of Fukuda and Priem.

Willan teaches a computer graphics system having an input device and a means for detecting changes in the position of the input device relative to a surface (col. 1, lines 41-44). Willan further teaches a means for determining at least one derivative with respect to time of the input device position, and controlling characteristics of displayed patterns based upon the derivative (col. 1, lines 47-51). The Examiner alleges Willan

teaches a graphical input system in which the "shape, width, density, texture and color of the resultant visual effect" were determined due to velocity, acceleration or higher order derivatives, citing col. 1, line 45 to col. 2, line 3 of Willan. Willan, however, teaches relying on an input from an input device for determining a point in time to change the appearance of a particular visual effect. Willan thus requires user input to vary the appearance of a visual effect.

Accordingly, Fukuda, Priem, and Willan, either taken alone or in combination, fail to teach or suggest a combination of elements including, at least, "gradually extinguishing said trace mark starting from a rear section of said trace mark by progressively making said rear section lighter in color and moving toward a front section of said trace mark with a lapse of time, wherein said polygons toward the rear of said trace mark disappear first," as required by claim 15, from which claim 20 depends. Claim 21 depends from claim 20 and is allowable for at least the same reasons. Applicants respectfully request the Examiner to withdraw the rejection of claims 20 and 21 for at least the above reasons.

Applicants respectfully traverse the rejection of claims 28, 35, and 36 under 35 U.S.C. § 103(a) as unpatentable over Fukuda and Priem in view of Gengler.

Claim 28 recites a combination including, among other things, "processing and displaying means for processing and displaying a trace mark according to said object moving virtually in a three-dimensional virtual space during the processing of said game, and a past trace mark, said trace mark comprising a plurality of polygons, and for gradually extinguishing said trace mark starting from a rear section of said trace mark by progressively making said rear section lighter in color and moving toward a front

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section of said trace mark with a lapse of time, wherein said polygons toward the rear of said trace mark disappear first." As discussed above, Fukuda or Priem, taken alone or in combination, do not disclose or suggest at least these exemplary features of Applicants' claimed invention.

Moreover, Gengler does not make up for the deficiencies of Fukuda and Priem. Gengler discloses a method and apparatus for subdividing a frame buffer, along window plane boundaries, into multiple images that are processed through independent color maps and blended into a single image on arbitrary window boundaries (col. 2, lines 56-62). A window refers to a region of interest in the frame buffer (col. 1, lines 62-64). The image processing provides, for example, real-time fading of one image into another or fading out an entire image (col. 5, lines 40-45). Gengler, however, does not disclose or suggest at least the exemplary features of Applicants' claimed invention. Accordingly, the Examiner should withdraw the rejection and allow claim 28.

Claim 35 depends from claim 28 and is allowable for at least the reasons described above for allowable claim 28. Claim 36 multiply depends from independent claims 15 and 28, which are allowable for reasons set forth above (and also depends from claims 29 and 33, which have been allowed), as well as dependent claims 17, 18, and 35, which each depend from one of those independent claims (and also depends from claims 30-32 and 34, which have been allowed).

### CONCLUSION

In view of the foregoing remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge  
any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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